UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,782	11/18/2002	Fu-Chang Lin	DTCP0001USA	2416

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EXAMINER
BAKER, CHARLOTTE M

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
05/11/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com
Patent.admin.uspto.Rcv@naipo.com
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PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/065,782	LIN, FU-CHANG
	Examiner	Art Unit	
	Charlotte M. Baker	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 6-9* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>07/10/2006</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ .

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date._____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 03/27/2007 have been fully considered but they are not

persuasive. Regarding Applicant's argument that Hatakenaka et al. do not teach a computer

system comprising an operating system with an upper layer for controlling a graphical device

interface or a lower layer for controlling input/output activities, Hatakenaka et al. was not relied

upon for these teachings. Admitted prior art was used to reject these limitations. In addition,

Hatakenaka et al. do teach a computer system as evidenced by control unit 11 which is made up

of a CPU or the like (see col. 4, ln. 21-36). Regarding Applicant's argument that Hatakenaka et

al. fail to teach "without utilizing the upper layer", Hatakenaka et al. was not relied upon for this

limitation. Sabbagh et al. was used to reject this limitation. In conclusion, the combination of

Hatakenaka et al., Admitted prior art and Sabbagh et al. disclose the claimed invention. See

rejections below.

Drawings

2.   The drawings are objected to under 37 CFR 1.83(a). The drawings must show every

feature of the invention specified in the claims. Therefore, the method steps (flow chart) of

claims 1-4 and 6-9 must be shown or the feature(s) canceled from the claim(s). No new matter

should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to

the Office action to avoid abandonment of the application. Any amended replacement drawing

sheet should include all of the figures appearing on the immediate prior version of the sheet,

even if only one figure is being amended. The figure or figure number of an amended drawing

should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

must be removed from the replacement sheet, and where necessary, the remaining figures must

be renumbered and appropriate changes made to the brief description of the several views of the

drawings for consistency. Additional replacement sheets may be necessary to show the

renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The

objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hatakenaka et al. (6,075,949) in view of admitted prior art and further in view of Sabbagh et al.

(6,814,510).

Regarding claim 1: Hatakenaka et al. disclose providing the computer system (control unit 11

can be CPU, col. 4, ln. 21-36); utilizing a printer manager (Fig. 3, signal processing unit 3 and

encoding/decoding unit 4 and printer interface 8) of the computer system (control unit 11 can be

CPU, col. 4, ln. 21-36)(Examiner is using Fig. 3, signal processing unit 3 and encoding/decoding

unit 4 and printer interface 8 as a print manager and those elements are electrically connected to

control unit 11 which reads on the printer manager being a part of the computer system) for

generating the print data (Fig. 3, signal processing unit 3 and encoding/decoding unit 4 and

printer interface 8), the printer manager comprising a device-dependent converter (Fig. 3, signal

processing unit 3) for converting input data into device-dependent output data (Fig. 3, signal

processing unit 3 and encoding/decoding unit 4 and printer interface 8) (col. 4, ln. 3-20) that is

suitable for a first type of printer but not suitable for a second type of printer (Since Hatakenaka

et al. do not teach that the print data is suitable for all types of printers and teaches printer 31, it

is inherently taught that the print data is suitable for one type of printer (31) but not for a second

(different) type of printer; printer 31, col. 5, ln. 14-24); providing encoded data

(encoding/decoding unit 4 in Fig. 3) to the print manager (Fig. 3, signal processing unit 3 and

encoding/decoding unit 4 and printer interface 8); the printer manager (Fig. 3, signal processing

unit 3 and encoding/decoding unit 4 and printer interface 8) decoding the encoded data (Fig. 3,

encoding/decoding unit 4) to generate raw data (col. 5, ln. 39-43), and utilizing the converter

(Fig. 3, signal processing unit 3) to convert the raw data into the device-dependent print data

(col. 4, ln. 3-20); the printer being the first type of printer (printer 31, col. 5, ln. 14-24);

outputting the device-dependent print data to the printer (printer 31, col. 5, ln. 14-24).

Hatakenaka et al. fail to specifically address an operating system with upper and lower

layers and providing the print data to the lower layer.

Admitted prior art discloses an operating system (Fig. 1, OS12) having an upper layer

(Fig. 1, upper layer 15) for controlling a graphical device interface (Fig. 1, GDI 16), and a lower

layer (Fig.1, lower layer 18) for controlling input/output activities (par. 4); providing the device-

dependent print data to the lower layer (Fig. 1, lower layer 18); and the lower layer (Fig. 1, lower

layer 18) of the operating system (Fig. 1, OS12).

It would have been obvious to a person of ordinary skill in the art at the time of the

invention to include the teaching of the admitted prior art in order to print the data received from

the computer system as taught by admitted prior art (par. 4).

Hatakenaka et al. fail to specifically address without utilizing the upper layer.

Sabbagh et al. disclose without utilizing the upper layer (Fig. 3, path 320 and col. 3, ln.

39-51).

It would have been obvious to a person of ordinary skill in the art at the time of the

invention to include the teaching of Sabbagh et al. in order to directly create a spool file without

using the GDI (col. 3, ln. 49-51).

Regarding claim 4: Hatakenaka et al. in view of admitted prior art and further in view of

Sabbagh et al. satisfy all the elements of claim 1. Hatakenaka et al. further disclose a user

interface (Fig. 3, control unit 11) for configuring the print manager (Fig. 3, signal processing unit

3 and encoding/decoding unit 4 and printer interface 8), wherein the converter (Fig. 3, signal

processing unit 3) converts the raw data into the device-dependent print data (col. 4, ln. 3-20)

according to configuration information of the user interface (Fig. 3, control unit 11 and col. 5, ln.

3-).

1.   Claims 2-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hatakenaka et al. in view of admitted prior art and further in view of Sabbagh et al. and further

in view of Shiohara (6,618,553).

Regarding claim 2: Hatakenaka et al. in view of admitted prior art and further in view of

Sabbagh et al. satisfy all the elements of claim 1.

Hatakenaka et al. in view of admitted prior art and further in view of Sabbagh et al. fail to

specifically address the converter which converts raw data into gray-level image data and

converts the gray-level image data into print data.

Shiohara discloses wherein the converter (Fig. 11, rasterizer 221) converts the raw data

into gray-level image data and converts the gray-level image data into the device-dependent print

data (col. 10, ln. 6-16).

It would have been obvious to a person of ordinary skill in the art at the time of the

invention to include the converter to allow the processing of monochrome image data as taught

by Shiohara (col. 10, ln. 6-12).

Regarding claim 3: Hatakenaka et al. in view of admitted prior art and further in view of

Sabbagh et al. satisfy all the elements of claim 1.

Hatakenaka et al. in view of admitted prior art and further in view of Sabbagh et al. fail to

specifically address the converter which converts raw data into cyan-magenta-yellow-black

(CMYK) image data and converts the CMYK image data into print data.

Shiohara discloses wherein the converter (Fig. 11, rasterizer 221) converts raw data into

cyan-magenta-yellow-black (CMYK) image data and converts the CMYK image data into

device-dependent print data (Fig. 11 and col. 10, ln. 18-22).

It would have been obvious to a person of ordinary skill in the art at the time of the

invention to include the converter to relate the data to print colors as taught by Shiohara (col. 10,

ln. 18-22).

Regarding claim 6: Hatakenaka et al. in view of admitted prior art and further in view of

Sabbagh et al. satisfy all the elements of claim 1.

Hatakenaka et al. in view of admitted prior art and further in view of Sabbagh et al. fail to

specifically address encoded data stored in JPEG format.

Shiohara discloses wherein the encoded data is stored in a joint photographic experts

group (JPEG) format (col. 4, ln. 16-34).

It would have been obvious to a person of ordinary skill in the art at the time of the

invention to store the encoded data in JPEG format in order to apply the normal standard of

compression as taught by Shiohara (col. 1, ln. 22-27).

2.   Claims 7-9 rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakenaka et al.

in view of admitted prior art and further in view of Sabbagh et al. and further in view of

Nakajima et al. (US 2002/0135687 A1).

Regarding claim 7: Hatakenaka et al. in view of admitted prior art and further in view of

Sabbagh et al. satisfy all the elements of claim 1.

Hatakenaka et al. in view of admitted prior art and further in view of Sabbagh et al. fail to

specifically address encoded data stored in GIF format.

Nakajima et al. disclose wherein the encoded data is stored in a graphics interchange

format (GIF) (par. 58).

It would have been obvious to a person of ordinary skill in the art at the time of the

invention in order to employ another storage format other than JPEG as taught by Nakajima et al.

(par. 58).

Regarding claim 8: Hatakenaka et al. in view of admitted prior art and further in view of

Sabbagh et al. satisfy all the elements of claim 1.

Hatakenaka et al. in view of admitted prior art and further in view of Sabbagh et al. fail to

specifically address encoded data stored in BMP format.

Nakajima et al. disclose wherein the encoded data is stored in a bitmap (BMP)(par. 58).

Regarding claim 9: Hatakenaka et al. in view of admitted prior art and further in view of

Sabbagh et al. satisfy all the elements of claim 1.

Hatakenaka et al. in view of admitted prior art and further in view of Sabbagh et al. fail to

specifically address encoded data stored in TIFF format.

Nakajima et al. disclose wherein the encoded data is stored in a tag image file format

(TIFF)(par. 58).

Conclusion

3.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,
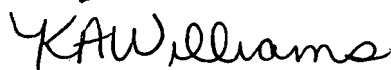
however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Charlotte M. Baker whose telephone number is 571-272-7459.

The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CMB

KIMBERLY WILLIAMS
PRIMARY PATENT EXAMINER